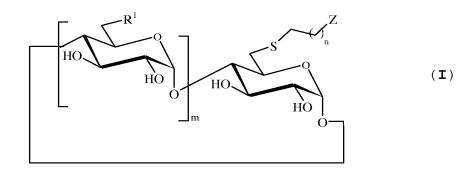
## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## LISTING OF CLAIMS:

1-29. (canceled)

30. (withdrawn, currently amended) A process for the preparation of a compound of formula (I)



## in which:

- n represents an integer from 1 to 6;
- m represents an integer equal to 5, 6 or 7;
- $R^1$  represents either an OH group or an -S-CH<sub>2</sub>-  $(CH_2)_n$ -Z group, the  $R^1$  groups all being identical;
  - Z represents either:
  - \* an NHX group,
  - \* a quaternary ammonium group of the 'NX3 form,
  - \* a NX NHR group,

X representing a hydrogen atom or an alkyl group comprising from 1 to 6 carbon atoms, and

R representing a hydrogen atom, a linear or branched alkyl substituent with 1 to 12 carbon atoms, or an aromatic group, or a derivative of said aromatic group carrying at least one substituent on the aromatic ring selected from the group consisting of methyl, ethyl, chlorine, bromine, iodine, nitro, hydroxyl, methoxyl and acetamido,

or R representing a biorecognition element comprising an amino acid derivative, a peptide, a monosaccharide, an oligosaccharide, a multiplication element with several branchings comprising glucidic groups which can be identical or different, or a visualization probe or fluorescent or radioactive detection probe,

said process comprising the following stages:

reacting a compound selectively or totally halogenated in primary alcohol position, of the following formula
 (VII):

m being as defined above,

W representing an OH group or a Y group, the W groups all being identical,

and Y representing a halogen atom chosen from the group consisting of chlorine, bromine, and iodine,

with an  $\omega\text{-aminoalkanethiol}$  of the following formula (VIII):

$$X \xrightarrow{N} \xrightarrow{N} SH$$
 (VIII)

said  $\omega$ -aminoalkanethiol optionally being N-alkylated, or the corresponding salt of the following formula (VIII-a):

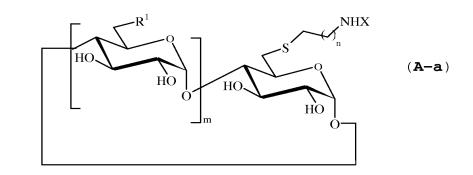
$$H_2XN$$
 $N$ 
 $SH$ 
 $(VIII-a)$ 

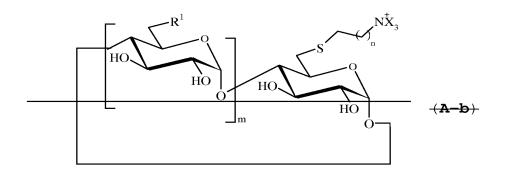
or a tetraalkylammonium salt of the following formula

$$X_3$$
  $N$   $SH$   $(VIII-b)$ 

said salt being associated with a halide counter ion,
n and X being as defined above,

in order to obtain a compound of formula (I) as defined above and having the following formulae (A-a)  $\frac{\partial F}{\partial x}$ :





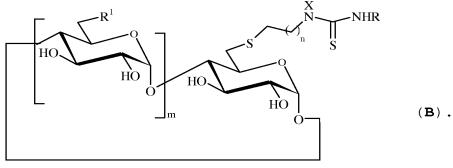
and

- the reaction of the compound of formula (A-a) as obtained in the preceding stage with an isothiocyanate of the following formula (IX):

$$R-N=C=S$$
 (IX)

in which R is as defined above,

in order to obtain a compound of formula (I) as defined above, and corresponding to the following formula:



31. (withdrawn, currently amended) The preparation process according to claim 30 of a compound having the following general formula (I-b):

said process comprising the following stages:

- reacting a per(6-deoxy-6-halo) cyclodextrin compound, of the following formula (VII-a):

with an  $\omega\text{-aminoalkanethiol}$  of the following formula (VIII):

$$X \xrightarrow{N} \underbrace{\downarrow}_{n} SH$$
 (VIII)

said  $\omega$ -aminoalkanethiol being N-alkylated,

or the corresponding salt of the following formula  $(\mbox{VIII-a}): \label{eq:viii}$ 

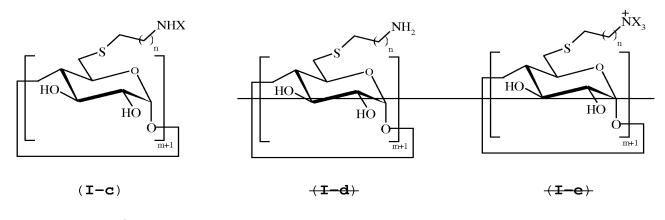
$$H_2XN$$
 (VIII-a)

or a tetraalkylammonium salt of the following formula

said salt being associated with a halide counter ion, and  $\boldsymbol{X}$  being a hydrogen atom,

the compound of formula (VIII) being cysteamine of formula  $\rm H_2N-CH_2-CH_2-SH$  ,

in order to obtain a compound of the following formulae (I-c),  $\frac{\text{(I d) or (I e)}}{\text{(I d) or (I e)}}$ 

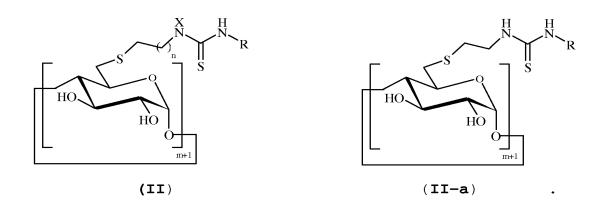


and

- the reaction of the compound of formula (I-c) as obtained in the preceding stage with an isothiocyanate of the following formula (IX):

$$R-N=C=S$$
 (IX)

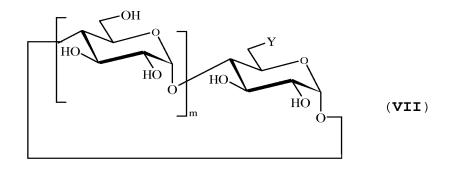
in order to obtain a compound of the following formula  $({\tt II}) \ \, {\tt or} \ \, ({\tt II-a})$ 



32.(withdrawn, currently amended) The preparation process according to claim 30 of compounds having the following formula:

said process comprising the following stages:

- reacting a compound selectively halogenated in primary alcohol position, of the following formula (VII):



with an  $\omega\text{-aminoalkanethiol}$  of the following formula (VIII):

$$\begin{array}{c}
H \\
X \\
N \\
N \\
N \\
SH
\end{array}$$
(VIII)

said  $\omega\text{-aminoalkanethiol}$  optionally being N-alkylated, or the corresponding salt of the following formula (VIII-a):

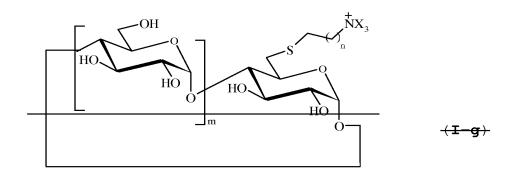
or a tetraalkylammonium salt of the following formula (VIII-b):

said salt being associated with halide as a counter ion, and preferably being the chloride ion,

and X being a hydrogen atom,

the compound of formula (VIII) being cysteamine of formula  $\mbox{H}_2\mbox{N-CH}_2\mbox{-CH}_2\mbox{-SH,}$ 

in order to obtain a compound of formula (I-f)  $\frac{1}{2}$ , of the following formula:



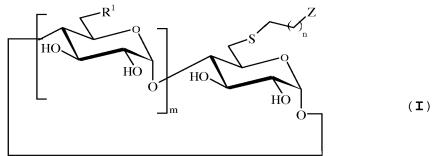
and reacting the compound of formula (I-f) as obtained in the preceding stage with an isothiocyanate of the following formula (IX):

$$R-N=C=S$$
 (IX)

in order to obtain a compound of formula (I-h):

33. (cancelled)

34. (currently amended) A compound of the following general formula:



in which:

- n represents an integer from 1 to 6;
- m represents an integer equal to 5, 6 or 7;
- $R^1$  represents either an OH group or an -S-CH<sub>2</sub>-(CH<sub>2</sub>)<sub>n</sub>-Z group, the  $R^1$  groups all being identical;
  - Z represents either:
  - \* an NHX group,
  - \* a quaternary ammonium group of the 'NX3 form,

X representing a hydrogen atom or an alkyl group comprising from 1 to 6 carbon atoms, and

R representing a hydrogen atom, a linear or branched alkyl substituent with 1 to 12 carbon atoms, or an aromatic group, or a derivative of said aromatic group carrying at least one substituent on the aromatic ring selected from the group

consisting of methyl, ethyl, chlorine, bromine, iodine, nitro, hydroxyl, methoxyl and acetamido,

or R representing a biorecognition element comprising an amino acid derivative, a peptide, a monosaccharide, an oligosaccharide, a multiplication element with several branchings comprising glucidic groups which can be identical or different, or a visualization probe or fluorescent or radioactive detection probe,

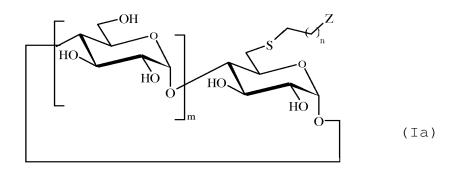
provided that the compound in which n = 1, m = 6, Z =  $$\operatorname{NH}_2$$  and  $R_1$  = OH is excluded.

35. (previously presented) The compound of claim 34, wherein  ${\bf R}^1$  represents OH, and having the following general formula:

$$\begin{array}{c|c} & & & Z \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

36. (cancelled)

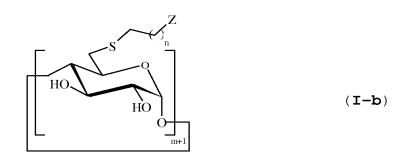
37. (previously presented) The compound of claim 34, wherein  $\mathbb{R}^1$  represents OH, having the formula (I-a)



and Z represents a

$$NX$$
  $NHR$  group, X being a hydrogen atom.

38. (previously presented) The compound of claim 34, wherein  $R^1$  represents an  $-S-CH_2-(CH_2)_n-Z$  group, and having the following general formula:



39. (cancelled)

- 40. (cancelled)
- 41. (cancelled)
- 42. (previously presented) The compound of claim 38, wherein Z represents a  $\stackrel{NX}{\longrightarrow} \stackrel{NHR}{\longrightarrow}$  group, and having the following formula:

$$\begin{array}{c|c}
X & H \\
N & N \\
N & R
\end{array}$$

$$(II)$$

R being identical for each 
$$^{NX}$$
  $\bigvee_{\epsilon}^{NHR}$  group.

43. (previously presented) The compound of claim 38, NX NHR wherein Z represents a group, X represents a hydrogen atom and n is equal to 1, and having the following formula:

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

44. (cancelled)

## 45. (cancelled)

46. (previously presented) The compound according to claim 34, wherein  $R^1$  represents an  $-S-CH_2-(CH_2)_n-Z$  group, Z represents a NX NHR group, X represents a hydrogen atom, n is equal to 1, and the R group is chosen from the following groups: 
- the  $\alpha-D$ -mannopyranosyl group, of the following formula (III):

$$\begin{array}{c} \text{HO} \\ \text{HO} \\ \end{array} \begin{array}{c} \text{OH} \\ \text{OH} \\ \end{array}$$

- the  $\beta\text{--lactosyl}$  group, of the following formula (III-a):

$$\begin{array}{c}
OH & OH \\
OH & OH
\end{array}$$

$$OH & OH \\
OH & OH
\end{array}$$

$$(III-a)$$

- the group derived from Lewis X trisaccharide or from sialyl Lewis X tetrasaccharide, of the following formulae (III-b) and (III-c) respectively:

- an oligosaccharide derived from heparin, of the following formula (III-d):

47. (currently amended) The compound of claim 34, wherein  $R^1$  represents an  $-S-CH_2-(CH_2)_n-Z$  group, Z represents a NX NHR group, X represents a hydrogen atom, n is equal to 1, and:

R comprises a branching element  $\frac{\text{comprising}}{\text{consisting of}}$  tris(2-hydroxymethyl)methylamine  $\frac{\text{radical}}{\text{radical}}$ , or

R represents one of the following groups:

- the tris( $\alpha$ -p-mannopyranosyloxymethyl)methyl group, of the following formula (IV):

- the tris( $\beta$ -lactosyloxymethyl)methyl group, of the following formula (IV-a):

48. (previously presented) The compound of claim 34, wherein Z represents a  $\stackrel{NX}{\longrightarrow} \stackrel{NHR}{\longrightarrow}$  group, wherein R comprises a branching element derived from pentaerythritol, said compound having the following formula:

in which  $\mbox{R}^2$  and  $\mbox{R}^3$  represent glucidic derivatives which can be different or identical or also a fluorescent or radioactive probe.

- 49. (previously presented) The compound of claim 48, wherein  $\ensuremath{\mbox{R}^1}$  represents OH.
- 50. (previously presented) The compound of claim 48, wherein  $\mathbb{R}^1$  represents formula:

$$-S \xrightarrow{X} \stackrel{H}{\underset{S}{N}} \xrightarrow{V} O \xrightarrow{SR_2} SR_2$$

- 51. (previously presented) The compound of claim 48, wherein n is equal to 1, X represents a hydrogen atom and  $\mathbb{R}^2$  and  $\mathbb{R}^3$  represent one of the following groups:
- the  $\alpha$ -p-mannopyranosyl group, of the following formula (III):

- the  $\beta$ -lactosyl group, of the following formula (III-a):

- the  $\beta\text{--p-glucopyranosyl}$  group, of the following formula (VI):

 $R^2$  and  $R^3$  being able to be identical or different.

- 52. (previously presented) The compound of claim 34 wherein m is equal to 6.
- 53. (previously presented) An inclusion complex of a compound according to claim 34 with a pharmacologically active molecule, a molar ratio between the compound and the pharmacologically active molecule being approximately 50:1 to approximately 1:1.
- 54. (previously presented) An inclusion complex of a compound according to claim 34 with a pharmacologically active molecule, a molar ratio between the compound the

pharmacologically active molecule being approximately 50:1 to approximately 1:1, wherein the pharmacologically active molecule is an antienoplastic agent belonging to the taxol family.

- 55. (previously presented) A pharmaceutical composition comprising a compound according to claim 34 with a pharmacologically acceptable vehicle.
- 56. (previously presented) A pharmaceutical composition comprising an inclusion complex of a compound according to claim 34, with a pharmacologically active molecule, a molar ratio between the compound and the pharmacologically active molecule being approximately 50:1 to approximately 1:1, in association with a pharmacologically acceptable vehicle.
- 57. (previously presented) A pharmaceutical composition comprising a compound according to claim 34 with a pharmacologically acceptable vehicle, in the form of an aqueous solution.
- 58. (previously presented) A pharmaceutical composition comprising an inclusion complex of a compound according to claim 34 with a pharmacologically active molecule, a molar ratio between the compound and the pharmacologically active molecule being approximately 50:1 to approximately 1:1, in association

Docket No. 0508-1141 Appln. No. 10/551,343

with a pharmacologically acceptable vehicle, the pharmacological compound being in the form of an aqueous solution.

- 59. (previously presented) A pharmaceutical composition comprising a compound according to claim 34 with a pharmacologically acceptable vehicle, wherein the composition contains per single dose approximately 50 mg to approximately 500 mg of one of the compound.
- 60. (previously presented) A pharmaceutical composition comprising an inclusion complex of a compound according to claim 34 with a pharmacologically active molecule, a molar ratio between the compound and the pharmacologically active molecule being approximately 50:1 to approximately 1:1, in association with a pharmacologically acceptable vehicle, wherein the composition contains per single dose approximately 100 mg to approximately 750 mg of one of said complex.